

AMENDMENTS IN THE CLAIMS

1. (currently amended) In a modular computer system environment, a method comprising:

modeling publication data within a publication object that includes said publication data and an identifier (ID) indicating a type of data within said publication object, wherein said publication data is provided in a pre-established format consumable and recognizable by any one of a plurality of [[said]] subscribe components of the computer system environment which has a plurality of publish components along with the plurality of subscribe components coupled to nodes of a central information bus configuration (CIBC), which enables system-wide intercommunication among the plurality of publish components and subscribe components;

receiving subscriptions from one or more of said subscribe components for said publication data; and

when said publication object is published on said central information bus, directing an issuance of said publication data to said one or more subscribe components via directed broadcast.

2. (previously presented) The method of Claim 1, further comprising:

modeling at least one of said subscriptions as a subscription object that includes a request for the particular type of data and a node ID for the node at which the subscription object is generated;

wherein, said request includes the ID of the type of data; and

wherein said subscription is received from the node indicated by said node ID, and said directing of the issuance of the publication data directs the publication data to be issued to said node from which the subscription object is generated.

3. (original) The method of Claim 2, said receiving step further comprising:

registering the request for said data in a registration facility of said CIBC; and

comparing the ID for each publication object against the request ID in said registration facility; and

signaling a match of said IDs and identifying a node for which said publication data is to be sent.

4. (original) The method of Claim 1, further comprising:
 - placing said publication object in a queue prior to issuing said publication data to said one or more subscribing component; and
 - issuing said publication data from said queue when said publication object reaches a top of said queue.
5. (previously presented) The method of Claim 4, wherein said publication object includes a priority value, said placing step further comprising:
 - arranging each publication object within said queue according to the priority value of each publication object;
 - when two publication objects have a same priority value, arranging said two objects according to a time of entry into said queue, wherein a first incoming object is placed within the queue ahead of a second incoming object with a same priority value, while a later received publication object with a higher priority value is placed within the queue ahead of an earlier received publication object with a lower priority value, and wherein the publication data is issued from the queue in the order in which the publication object is received at the queue relative to other publication objects with the same priority value that are placed in the queue; and
 - issuing said publication data according to a sequential order of the publication object within the queue relative to other publication objects.
6. (currently amended) The method of Claim 4, wherein:
 - said publication object includes a freshness level indicator; and
 - said method further comprises:
 - determining, prior to issuing said publication data, whether said publication object is stale; and
 - when a queued publication object is stale, dynamically triggering a publication of a more current publication object from the publish component and discarding the queued publication object.
7. (previously presented) The method of Claim 6, wherein said freshness level indicator is a timestamp and said method further comprises:

evaluating when the timestamp indicates the publication object was published before a prior time at which the publication object is considered stale; and

initiating said determining and triggering steps to retrieve the more current publication object when the timestamp indicates the publication object is stale.

8. (original) The method of Claim 2, wherein said request within said subscription object further comprises an expression delimiter that indicates particular criteria to be met for a publication data to satisfy said request.

9. (original) The method of Claim 1, wherein said CIBC is an information kit and said publication object and subscription objects are information kit objects.

10. (currently amended) The method of Claim 9, wherein at least one of said subscribe component and said publish component is an agent that completes a second[[ary]] function upon receipt of said publication data.

11. (previously presented) In a modular computer system environment, a system comprising:
a processing component; and
program means executing on the processing component for enabling system-wide intercommunication among a plurality of publish and subscribe components coupled to nodes of a central information bus configuration (CIBC), said program means comprising:

means for modeling publication data within a publication object that includes said data and an identifier (ID) indicating a type of data within said publication object, wherein said publication data is provided in a pre-established format consumable/recognizable by any one of said subscribe components;

means for receiving subscriptions from one or more of said subscribe components for said publication data; and

means, when said publication object is published on said central information bus, for directing an issuance of said publication data to said one or more subscribe components via directed broadcast.

12. (previously presented) The system of Claim 11, said program means further comprising:

means for modeling at least one of said subscriptions as a subscription object that includes a request for the particular type of data and a node ID for the node at which the subscription object is generated;

wherein, said request includes the ID of the type of data; and

wherein said subscription is received from the node indicated by said node ID, and said directing of the issuance of the publication data directs the publication data to be issued to said node from which the subscription object is generated.

13. (previously presented) The system of Claim 12, said means for receiving further comprises:

means for registering the request for said data in a registration facility of said CIBC;

means for comparing the ID for each publication object against the request ID in said registration facility; and

means for signaling a match of said IDs and identifying a node for which said publication data is to be sent.

14. (previously presented) The system of Claim 11, said program means further comprising:

means for placing said publication object in a queue prior to issuing said publication data to said one or more subscribing component; and

means for issuing said publication data from said queue when said publication object reaches a top of said queue.

15. (previously presented) The system of Claim 14, wherein said publication object further includes a priority value, said means for placing further comprising:

means for arranging each publication object within said queue according to the priority value of each publication object;

means, when two publication objects have a same priority value, for arranging said two objects according to a time of entry into said queue, wherein a first incoming object is placed within the queue ahead of a second incoming object with a same priority value, while a later received publication object with a higher priority value is placed within the queue ahead of an earlier received publication object with a lower priority value, and wherein the publication data

is issued from the queue in the order in which the publication object is received at the queue relative to other publication objects with the same priority value that are placed in the queue; and

means for issuing said publication data according to a sequential order of the publication object within the queue relative to other publication objects.

16. (currently amended) The system of Claim 14, wherein:

said publication object includes a freshness level indicator; and

said program means further comprises:

means for determining, prior to issuing said publication data, whether said publication object is stale; and

means, when a queued publication object is stale, for dynamically triggering a publication of a more current publication object from the publish component and discarding the queued publication object.

17. (previously presented) The system of Claim 16, wherein said freshness level indicator is a timestamp and said system further comprises:

means for evaluating when the timestamp indicates the publication object was published before a prior time at which the publication object is considered stale; and

means for initiating said determining and triggering to retrieve the more current publication object when the timestamp indicates the publication object is stale.

18. (original) The system of Claim 12, wherein said request within said subscription object further comprises an expression delimiter that indicates particular criteria to be met for a publication data to satisfy said request.

19. (original) The system of Claim 11, wherein said CIBC is an information kit and said publication object and subscription objects are information kit objects.

20. (currently amended) The system of Claim 19, wherein at least one of said subscribe component and said publish component is an agent that completes a second[[ary]] function upon receipt of said publication data.

21. (currently amended) A computer program product for use within a modular computer system environment, said program product comprising:

a ~~tangible~~ recordable-type computer readable medium; and

program code on said recordable-type computer readable medium for enabling system-wide intercommunication among a plurality of publish and subscribe components coupled to nodes of a central information bus configuration (CIBC), said program code further comprising code for:

modeling publication data within a publication object that includes said data and an identifier (ID) indicating a type of data within said publication object, wherein said publication data is provided in a pre-established format consumable/recognizable by any one of said subscribe components;

receiving subscriptions from one or more of said subscribe components for said publication data; and

when said publication object is published on said central information bus, directing an issuance of said publication data to said one or more subscribe components via directed broadcast.

22. (previously presented) The computer program product of Claim 21, further comprising code for:

modeling at least one of said subscriptions as a subscription object that includes a request for the particular type of data and a node ID for the node at which the subscription object is generated;

wherein, said request includes the ID of the type of data; and

wherein said subscription is received from the node indicated by said node ID, and said directing of the issuance of the publication data directs the publication data to be issued to said node from which the subscription object is generated.

23. (currently amended) The computer program product of Claim 22, said code for receiving [[step]] further comprising code for:

registering the request for said data in a registration facility of said CIBC;

comparing the ID for each publication object against the request ID in said registration facility; and

signaling a match of said IDs and identifying a node for which said publication data is to be sent.

24. (original) The computer program product of Claim 21, further comprising code for:
placing said publication object in a queue prior to issuing said publication data to said one or more subscribing component; and
issuing said publication data from said queue when said publication object reaches a top of said queue.

25. (previously presented) The computer program product of Claim 24, wherein said publication object further includes a priority value, said code for completing said placing step further comprising code for:

arranging each publication object within said queue according to the priority value of each publication object;

when two publication objects have a same priority value, arranging said two objects according to a time of entry into said queue, wherein a first incoming object is placed within the queue ahead of a second incoming object with a same priority value, while a later received publication object with a higher priority value is placed within the queue ahead of an earlier received publication object with a lower priority value, and wherein the publication data is issued from the queue in the order in which the publication object is received at the queue relative to other publication objects with the same priority value that are placed in the queue; and

issuing said publication data according to a sequential order of the publication object within the queue relative to other publication objects.

26. (currently amended) The computer program product of Claim 24, wherein:

said publication object includes a freshness level indicator; and
said ~~computer program product~~ code further comprises code for:

determining, prior to issuing said publication data, whether said publication object is stale; and

when a queued publication object is stale, triggering a publication of a more current publication object from the publish component and discarding the queued publication object.

27. (previously presented) The computer program product of Claim 26, wherein said freshness level indicator is a timestamp and said program code further comprises code for:

evaluating when the timestamp indicates the publication object was published before a prior time at which the publication object is considered stale; and

initiating said determining and triggering steps to retrieve the more current publication object when the timestamp indicates the publication object is stale.

28. (original) The computer program product of Claim 22, wherein said request within said subscription object further comprises an expression delimiter that indicates particular criteria to be met for a publication data to satisfy said request.

29. (original) The computer program product of Claim 21, wherein said CIBC is an information kit and said publication object and subscription objects are information kit objects.

30. (currently amended) The computer program product of Claim 29, wherein at least one of said subscribe component and said publish component is an agent that completes a second[[ary]] function upon receipt of said publication data.